UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

DEC 10 2014

Mr. Bruce Campbell
Sr. Manager, Environmental Compliance
American Airlines, Inc.
4333 Amon Carter Blvd MD 5285
Fort Worth, Texas 76155

Mr. Robert Freeman
Environmental Manager II
Los Angeles World Airports
7301 World Way West
Los Angeles, California 90045

Re: EPA Conditional Approval of the Risk-Based Cleanup Approval Request for Management of PCBs at the Electrical Substation at Hangar 3, American Airlines Los Angeles International Airport

Dear Mr. Campbell and Mr. Freeman:

Thank you for your submission of the *Risk-Based Cleanup Approval Request,* for the American Airlines, Inc., (AA) electrical substation associated with Hangar 3 at the Los Angeles International Airport (LAX) (Site), dated November 3, 2014 (Application). The Application proposes management-in-place of polychlorinated biphenyl (PCB) contaminated surfaces at the Site. The U.S. Environmental Protection Agency (USEPA) is issuing this risk-based approval (Approval) under the Toxic Substance Control Act (TSCA) pursuant to 40 C.F.R. § 761.61(c).

The USEPA understands that the Los Angeles World Airports (LAWA) owns and operates the LAX and leases Hangar 3 and the associated electrical substation to AA. USEPA is issuing this Approval to both the property owner and the responsible party, LAWA and AA, respectively. This Approval covers PCB-impacted areas within the electrical substation at the Site.

In October 2013, AA reported that a PCB transformer at the Site released mineral oil containing PCBs at a concentration of 460,000 parts per million (ppm). The PCB transformer was subsequently removed, and remediation activities on the remaining concrete pad were conducted. However, verification sampling results indicated that residual PCB contamination remained on the concrete pad. The USEPA understands that the LAX will be undergoing expansion, and as part of the planned development, the LAWA will be demolishing Hangar 3 and associated structures, including the electrical substation. Decommissioning of the Site is estimated to take place in 2016.

Per the Application, AA proposes to carry out the PCB remediation effort in two phases. Phase I involves encapsulation of the PCB-impacted concrete pad with an epoxy sealant where the former PCB transformer was located. The sealant will be inspected and repaired, as necessary. Phase 2 includes fully

characterizing the concrete pad prior to demolition activities for disposal purposes; removing the concrete pad; and collecting verification samples to confirm adequate removal of PCB contamination.

USEPA has reviewed AA's Application, and has prepared this Approval with conditions. AA is subject to the following conditions pursuant to 40 C.F.R. § 761.61(c), and shall incorporate the stipulations of these conditions when implementing the activities proposed in the Application:

1. **Encapsulate**
   a. **Physical Wear of Encapsulate.** AA's Application indicates that the concrete pad will be inspected on a monthly basis to determine whether or not reapplication of sealant on the concrete pad is warranted. However the Application does not specify the methodology that will be used to determine whether or not the epoxy sealant is wearing away. AA may apply, but is not limited to, the following options:

      i. **Paint Indicator.** One method that may be used to determine whether or not the epoxy sealant is wearing away is to apply two layers of sealant, each containing a solvent resistant, water repellant paint layer. The paint layers should have contrasting colors. If the paint color of the bottom layer begins to show, this is an indication that the epoxy coating is starting to wear away. If this occurs, the sealant shall be reapplied.
      ii. **Non-Destructive Testing.** Another option that may be used to test the integrity of the epoxy sealant is use of ultrasonic technology to measure the thickness of the coating. This is a form of non-destructive testing. Records of the coat thickness should be maintained on-site. If the coating becomes too thin, the sealant shall be reapplied.

   At least one week prior to encapsulating the concrete pad, AA shall notify USEPA of the method selected for testing the integrity of the sealant over the concrete slab.

   b. **Effectiveness of the Encapsulate.** Analytical results of concrete core samples indicated that the highest total PCBs concentration detected was 1,810 ppm. To ensure that the epoxy coat adequately functions as a barrier, AA shall collect a wipe sample every six months following application of the sealant in the area where the highest PCB concentration was found in the concrete. If the wipe sampling results indicate any breaching of PCBs through the sealant, AA shall reapply the epoxy coating.

   c. **Labeling.** As required in the TSCA PCB regulation, AA shall place an M_L mark in a location that is easily visible to individuals present in the area. The M_L mark shall be replaced when worn or illegible.

   d. **Inspection and Annual Certification.** As part of the monthly inspection, AA shall record any visual observations of cracks; chips; and other damage or condition that might result in exposure or release, or compromise the integrity of the sealant and concrete. If results of the monthly inspection indicate that the integrity of the sealant and/or concrete is compromised AA shall make any necessary repairs within one week. AA shall certify to USEPA on an annual basis that the monthly inspections have been conducted. If any problems and note action taken; any damage that was observed, if any; and a description of how damage was resolved.

2. **PCB Cleanup Level.** The Application indicates that following removal of the concrete pad, the remaining soil will be tested and analyzed for total PCBs using EPA Method 8082. The analytical results will be compared to cleanup levels for low occupancy areas established in 40 C.F.R. § 761.61(a)(4)(i)(B). This Application was submitted to USEPA pursuant to 40 C.F.R. § 761.61(c), and as such, the cleanup goal shall be risk-based. Therefore, the cleanup goal shall either be based on the USEPA R9 regional screening level (RSL) for total PCBs, or AA may develop a site-specific risk-based screening level (RBSL).

   There are two sets of PCB RSLs; one for restricted use (industrial), and one for unrestricted use (residential). If AA would like to use a cleanup goal that corresponds with restricted use (industrial RSL), AA shall work with the landowner to incorporate land use controls (LUCs) associated with that portion of the property, subject to USEPA approval. On the other hand, if AA would like to use a cleanup goal that corresponds with unrestricted use, such as the residential RSL or develop a RBSL that USEPA agrees is protective for unrestricted use, AA will not be required to maintain a LUC at the Site.

   AA shall evaluate the cleanup goal options described above, discuss with LAWA as necessary, and then provide USEPA with the final decision.

3. **Schedule.** AA shall follow the schedule provided in Section VI of the Application, and any changes to the schedule must be requested in writing to USEPA for approval, at least one week prior to the changes being implemented.

After removal activities and soil verification sampling activities have been completed at the Hangar 3 electrical substation, USEPA will review the analytical data to determine if additional characterization and/or remediation activities are warranted. USEPA will notify AA of any additional approval applications that AA must submit to USEPA pursuant to 40 C.F.R. § 761.61(c).

Lastly, it has been USEPA's experience that hangar buildings at airports generally contain other sources of PCBs such as: paint, caulking, fluorescent light ballasts, dust, galbestos (generally found on the exterior portion of hangar buildings), hydraulic oil released historically from compressors or mechanical equipment. USEPA recommends that AA evaluate other potential sources of PCBs, and that a comprehensive PCB characterization be completed prior to decommissioning activities at Hangar 3.

This Approval does not relieve the Parties and their consultants from complying with other applicable TSCA PCB and Federal regulations, or state and local regulations and permits. Departure from this Approval without prior written permission from USEPA may result in revocation of this Approval. Nothing in this approval bars USEPA from imposing penalties for violations of this Approval or for violations of other applicable TSCA PCB requirements or for activities not covered under this Approval.

This approval only applies to the site that is the subject of this approval. USEPA reserves the right to require additional characterization and/or cleanup of PCBs at the Site if new information shows that PCBs remain at the Site above the USEPA-approved PCB cleanup levels, or if PCBs are found at other areas of the Site or immediately adjacent to the Site.

We look forward to assisting you during implementation of the approved Application as modified by this Approval. If you have any questions concerning this Approval, please contact Cynthia Ruelas at (415) 972-3329. Thank you for your cooperation.

Sincerely,

Jeff Scott, Director
Land Division

Electronic cc: David Hung, Los Angeles Regional Water Quality Control Board
John Haney, American Airlines